

Weaknesses and Strengths of Management in the European Universities: Some Experiences Learned from the NESOR Project

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Introduction

In the recent decades the European higher education has undergone several changes. The increasing numbers of students accompanied by decreasing public resources, the growing importance of global competition and the structural reforms under the umbrella of the Bologna Declaration have challenged the European higher education (HE) institutions. In relations with these changes relatively little attention was devoted to the challenges the university managements have to cope with. In this article the authors aim to provide a brief overview about this issue. In doing so the authors present the latest research results on the performance of European higher education in comparison with the United States and the empirical evidences collected in the NESOR project. NESOR (New Social Risks in the European Knowledge Society and Higher Education) is an international research project founded by the Socrates Programme of the European Commission. The aim of this project is to analyze the latest development of the HE in different European countries, to examine the approaches of the various reforms in order to assess the role of the higher education in the European Social Model and to contribute to the design of long term educational strategies of higher education in Europe. The following six partners participate in the NESOR project: University of Barcelona (Spain), University of Modena and Reggio Emilia (Italy), Radboud University of Nijmegen (the Netherlands), University of Łódź (Poland), Institute of Sociology, Hungarian Academy of Sciences (Hungary) and Navreme Knowledge Development (Austria). In Hungary during the empirical phase of the project 22 in-depth interviews and 4 focus groups were carried out among various stakeholders of the higher education, such as university professors, representatives of employers' associations, public bodies and private firms, etc. This contribution provides a critical analysis of the management practices at the Hungarian universities based on these empirical experiences learned within the NESOR project.

I. Diversity in the Performance of the Higher Education Systems: European versus US universities. Special focus on the NESOR countries

Recent debates on the emerging knowledge-based economy call the attention to the growing gap between the performance of American and European universities especially in respect of their research activities. The differences are visible in both the universities' scientific performance and the level and structure of higher education expenditures. In addition the gap between Europe and the US is widening in the long run. In Europe one of the answers to these challenges was the Bologna process, which in most of the European countries

accelerated the structural reforms of the higher education systems. However, the comparison of the performance of the various higher education institutions and systems is far from being unproblematic. Until now there is a shortage in coherent and widely accepted comparative methodologies.

In order to present the differences between the scientific performances of the European versus US universities will use the indicators developed by the Belgian Bruegel research institute (Aghion et alii, 2007). The indicators are based on the modified version of the Shanghai ranking. This ranking technique is a rather rigid and to some extent arbitrary measurement tool, but its advantage is that it is based on publicly available data. The Shanghai ranking is an aggregated index that captures the universities' scientific performance focusing on four dimensions: (a) Quality of education (b) Quality of faculty (c) Research output (d) Size of institution. The index aggregates the following six variables:

1. The number of alumni winning Nobel Prizes in physics, chemistry, medicine and economics and Fields Medal in mathematics at the university level
2. The number of alumni winning Nobel Prizes in physics, chemistry, medicine and economics and Fields Medal in mathematics at the faculty level
3. The number of highly cited researchers in 21 broad subject categories
4. The number of highly cited researchers in Nature and Science
5. The number of articles in Science Citation Index-expanded, Social Science Citation Index, and Arts & Humanities Citation Index
6. Academic performance with respect to the size of an institution

The Shanghai ranking index measures performance of the single institutions and does not provides information about the country-level performances. Therefore the researchers of the Bruegel institute evaluated the performance of the Top 50, Top 100, Top 200 and Top 500 universities with respect to the size of their country of origin. For example within the Top 50 list 50 scores were given to best performing university, 49 scores to the second, 48 to the third and 1 score to the last one. Than the sum of the Shanghai rankings related to a given country was divided by the number of the country's population. In order to capture the relative position of the European countries the country scores were divided by the US score, therefore the final results can be interpreted as the relative performance of the European countries in the ratio of the US's performance. The same logic was applied to the Top 100, Top 200 and Top 500 lists as well. The country scores are shown in Table 1.

Table 1. Country performance index (US = 100)

Country	Population (millions)	Shanghai ranking			
		Top 50	Top100	Top 200	Top 500
<i>Austria</i>	8	0	0	0	53
Belgium	10	0	0	61	122
Czech Republic	10	0	0	0	13
Denmark	5	0	75	114	161
Finland	5	0	46	75	81
France	60	3	15	29	45
Germany	83	0	17	37	67
Greece	11	0	0	0	12
<i>Hungary</i>	10	0	0	0	13
Ireland	4	0	0	0	50
<i>Italy</i>	58	0	0	11	34
<i>Netherlands</i>	16	20	51	76	131
<i>Poland</i>	38	0	0	0	4
<i>Spain</i>	43	0	0	0	14
Sweden	9	7	117	179	217
UK	60	72	86	98	124
EU15	383	13	26	41	67
EU25	487	10	21	32	54
Australia	20	0	31	66	101
Canada	32	39	54	63	104
Japan	128	0	17	24	27
Norway	5	0	66	91	107
Switzerland	7	97	166	228	230
US	294	100	100	100	100
California	36	234	199	163	103
Massachusetts	6	449	308	302	263
New York	19	196	167	139	148
Pennsylvania	12	111	177	161	115
Texas	23	33	61	83	103

Source: Aghione et alii 2007: 3

Table 1 indicates the followings. Firstly there is a clear gap between the performance of the European and US universities, especially among the Top 50 institutions. In addition, the top US states (Massachusetts, California, New York and Pennsylvania) perform better than any European country, even within both Top 50 and Top 100. In spite of the fact that the US states dominate the top segment of the university ranking, the performance gap is decreasing in the second and third tires. There are differences between the various European countries as well. The UK and Switzerland clearly outperform even in the Top 50, but the Nordic countries (especially Sweden) have a relative good position in the second and third tire, as Belgium and the Netherlands as well.

In respect of the **NESOR** countries we may observe the large relative gap between the different country performances. For example the **Dutch** universities outperform both the EU-15 and EU-25 in each tire from the Top 50 to the Top 500. Only **Italy** is present within the Top 200 category with a score of 11; all other countries' universities are only present in the last category (Top 500). The worst position has **Poland** with the performance of 4 scores within the Top 500. **Spain** and **Hungary**¹³ perform relatively poorly as well, while **Austria's** performance is relatively good, close to the one of **Italy**.

1.1 Higher education expenditures

One of the possible factors responsible for the large country performance differences is the level of both private and public expenditure on higher education across countries. Table 2 (following page) provides an overview about the level and structure of higher education expenditures in some European countries, Japan and the US.

¹³ The relatively poor performance of the Eastern-European countries (Hungary, Poland) can be partly explained by the fact that in these countries the research activities are delegated to research institutes of the Academies of Sciences, which institutions are independent from universities. In this model the main function of universities is teaching.

Table 2. Public and private expenditure on higher education, 2001

Country	As % of GDP			In thousand euros per student		
	Public	Private	Total	Public	Private	Total
Austria	1,4	0,1	1,5	11,0	0,5	11,5
Belgium	1,4	0,2	1,6	10,6	1,6	12,2
Czech Republic	0,8	0,1	0,9	2,3	0,4	2,7
Denmark	2,7	0,0	2,7	25,6	0,4	26,0
Finland	2,1	0,1	2,2	10,3	0,3	10,6
France	1,0	0,2	1,2	7,5	1,2	8,7
Germany	1,1	0,1	1,2	11,5	0,9	12,4
Greece	1,2	0,0	1,2	3,3	0,0	3,3
Hungary	1,1	0,3	1,4	2,6	0,6	3,2
Ireland	1,2	0,2	1,4	9,7	1,6	11,3
Italy	0,8	0,2	1,0	5,6	1,4	7,0
Netherlands	1,3	0,3	1,6	13,0	2,7	15,7
Poland	1,1	nd	nd	1,7	nd	nd
Spain	1,0	0,3	1,3	4,0	1,2	5,2
Sweden	2,1	0,2	2,3	18,9	1,8	20,7
UK	0,8	0,3	1,1	8,4	3,1	11,5
EU25	1,1	0,2	1,3	7,3	1,4	8,7
Japan	0,5	0,6	1,1	6,5	7,3	13,8
US	1,5	1,8	3,3	16,6	19,9	36,5

Source: Aghion et alii 2007:4

It is salient that the US spend lot more money on higher education than any European country. In addition there are differences in the structure of higher education expenditures, e.g. to the higher proportion of private contribution in the US. The 'Nordic' countries, especially Denmark and Sweden, spend more than the European average, mainly from public sources. In terms of the expenditure per student also the 'Anglo-Saxon' countries, Ireland and the UK are above average. (We have to note that the UK spends under the average in terms of the ratio of the expenditures to GDP. This is strongly related to the special financing structure of the British higher education institutions. This issue will be discussed later.) Among the countries belonging to the

'Continental' model slight differences were registered. **Austria**, Belgium and Germany spend more than the European average and about the same amount per student but France are close to the European average level expenditures (8.700 Euro/student). In addition in **Austria** and Belgium the higher education enjoys more significant founding in ratio to the country's GDP. The 'Mediterranean' countries perform under the average measuring the volume of higher education expenditures, but there are differences among them. For example Greek and **Spain** spend significantly less on higher education in terms of expenditures per capita than Italy does. In terms of the contribution to higher education in proportion of the GDP the three former socialist countries (Czech Republic, **Hungary** and **Poland**) show differences. Hungary spends more than the European average while the share of expenditures in the two other countries remains lower¹⁴. However if the expenditures per students are into consideration as well, we can see that even in the case of Hungary the level of spending reaches only 36 % of the European average, whilst in the case of **Poland** this figure remains under 20 %¹⁵.

Focusing only on the countries participating in the NESOR project these data suggest that the richer countries (**Austria**, the **Netherlands**) spend more resources on higher education in ratio of their GDP. There are quite visible differences between the NESOR countries not only in volume but in the structure of expenditures as well. In ratio of GDP Austria spends 1.4, the Netherlands 1.3 % on higher education whilst this proportion remains around 1 % in the other countries, except of Italy (0.8 %). The expenditures per full-time equivalent students, however, show even much greater differences. The **Netherlands** and **Austria** represent the highest level of expenditures, which is above the European average in both cases. The 'Mediterranean' countries, **Italy** and **Spain** spend less than the average and the worst position is represented by **Hungary**. Unfortunately the **Polish** data are restricted only on the public expenditures, which are about 65 % of the Hungarian one and 23 % of the European average.

Based on the data presented above one of the most important finding is that there is a positive correlation between the volume of higher education expenditures and the country performance. However, it is worth to question what structural characteristics of the higher education systems and their institutional environment in each country result this relation between the spending and performance. In order to partly answer this question in the following we briefly present the results of a representative questionnaire survey carried out by the Bruegel institute among the European universities belonging to the Top 500 tier classified by the Shanghai ranking.

¹⁴ In the case of Poland the data of private expenditures to the higher education were not available.

¹⁵ The lack of Polish data on private expenditures makes the comparison among the post-socialist countries problematic.

I.2 University performance and governance

The survey questionnaire collected data on the basic structural characteristics of universities (number of students, budget, public or private status) and several questions were designed to measure the following aspects of university governance:

1. Public or private status
2. Budget autonomy – whether the universities have an obligation of approving the budget by governmental authorities or not
3. Building ownership
4. Hiring autonomy – autonomy in hire and fire teaching and/or research staff
5. Wage setting autonomy – autonomy in defining faculty wages
6. Endogamy – share of in-house trained PhDs employed at faculty level.

The main results are presented in Table 3. Unfortunately the table contains information only about the countries where the response rate was higher than 10 %. Due to this threshold there are no data about **Austria, Hungary and Poland**.

Table 3. Characteristics of European Universities

Country	Age (years)	Number of students (1000s)	Budget per student (1000 €) ^a	Public status ^a	Budget autonomy ¹	Building ownership ¹	Hiring autonomy ¹	Wage-setting autonomy ¹	Faculty with in- house PhD (%)
Belgium	284,0	21,7	11,3	0,5	0,4	1,0	1,0	0,0	63,0
Denmark	59,0	18,2	11,4	1,0	1,0	0,3	0,5	0,5	40,0
Germany	289,0	26,2	9,6	0,9	0,0	0,5	0,8	0,0	40,0
Ireland	259,0	16,3	12,7	0,5	0,5	1,0	1,0	0,0	49,0
Italy	444,0	44,9	10,1	1,0	0,9	1,0	0,4	0,0	24,0
Netherlands	217,0	21,4	20,5	0,8	0,8	1,0	0,8	0,2	33,0
Spain	342,0	44,8	7,0	1,0	0,5	1,0	0,5	0,0	69,0
Sweden	266,0	27,1	16,2	0,8	0,8	0,2	1,0	1,0	58,0
Switzerland	326,0	12,8	26,2	0,8	0,1	0,4	0,8	0,0	24,0
UK	242,0	14,6	24,5	0,5	0,9	0,9	1,0	0,8	8,0
Total	290,0	24,9	16,1	0,8	0,6	0,8	0,8	0,3	29,0

^aPPP adjusted; ^{a1} if public; 0 if private; ¹ if yes, 0 if no

Source: Agnion et alii 2007:5

'Nordic' countries, like Sweden and the **Netherlands** are characterised by average size universities well supported from public financial resources. On the contrary, in the 'Mediterranean' region, **Italy** and **Spain** can be characterised by very large universities with less financial resources. The UK and Switzerland are dominated by relatively small universities that are very well financed. In the UK case the financial resources are distributed very unequally. The top research performer universities are extremely well financed in comparison to the great majority of the universities.

Focusing on the financing and on the issue of autonomy one can observe some common trends and some differences as well. The picture is rather mixed in terms of the university status. In the countries participating in the NESOR project represented in the survey, public universities dominate. In relation to the budgetary issues universities in such 'Continental' countries like Belgium, Germany or Switzerland enjoy less financial autonomy, while in the 'Nordic' countries the budget autonomy is not or slightly constrained. This is also true for the UK and **Italy**, but **Spain** and Ireland are somewhere in between.

Autonomy in hiring personnel is prevalent in almost all countries with the exception of Denmark and the 'Mediterranean' countries. Another important HRM feature is the wage-setting autonomy that is only present in the UK and in Sweden. The phenomenon of the endogamy (the percentage of employing PhDs trained in house) is visible in Belgium, Denmark, Ireland, Sweden and **Spain**, but not in Switzerland, Germany, **Italy**, the **Netherlands** and the UK. These figures indicate that there is the social models have no direct impact on the university governance patterns and on the country performances either.

Evaluating the interrelations between country performance and the various elements of the university governance we may identify the following patterns. The university performance based on the Shanghai ranking is positively correlated with such factors as

- (1) budget per student (the higher the budget per student, the better the performance),
- (2) budget autonomy measured by having an obligation of approving the budget by governmental authorities,
- (3) hiring and wage-setting autonomy.

Performance is negatively correlated with

- (1) the degree of public ownership (private universities perform better than public ones), and
- (2) the degree of endogamy, which means that universities hiring their own postgraduates perform worse.

Through the implementation of multivariable methods one can gain a picture about the deeper connections between variables. In analysing the effect of governance and finances on the university research performance regression analysis was applied. The following variables were involved into the regression model: 1) University size, 2) Age of the university, 3) Budget per student, 4) Public or private status, 5) Budget autonomy, 6) Building ownership, 7) Hiring autonomy, 8) Wage-setting autonomy, 9) Endogamy. The regression analysis indicates that that size and age of the university positively influence

the universities' research performance. Another important result is that there is a significant linkage between budget per student and research performance. More interesting is, however, that a correlation between the size of budget and budget autonomy was identified. It means that better financial conditions have more efficient influence on research performance if they are **combined** with increased budget autonomy that also includes a systematic performance evaluation.

In the followings we focus on the issues related to university management in Hungary using the empirical results of the NESOR project. The data collection was based on the interviews with stakeholders representing various interest groups of higher education, such as representatives of the HE institutions, different employer groups (both private and public sector, large and small firms, academic community etc. – see the Table of the interviewed persons in the Annex 1).

II. A Weak Point of the Hungarian Higher Education System: Governance and Management of the Universities

Both the research results presented above and the experiences of the stakeholders' interviews and the recent policy focused analysis on the reform on European universities are calling attention to the often under-estimated role of university governance and management (HRM practices). Assessing the impacts of the university governance in Hungary, we may say that the following factors have decisive importance:

- 1) State intervention even in the cases when universities are private
- 2) Corporate governance (decision making process, the role of ownership, etc.)
- 3) Economic, financial and HRM autonomy
- 4) Endogamy (i.e. measured as the percentage of faculty staff trained in-house at PhD level)

II.1 Financing of the HE institutions

In the following subsection we intend to analyse the role of the state intervention in two areas. Firstly we provide a brief overview on financing the HE institutions and in the second half of the subsection we summarise the Hungarian experiences of the structural HE reforms.

In focusing on the financial issues of the HE system it is worth to distinguish between three basic forms of university financing. The *normative financing* allocates financial resources to the HE institutions based on number of students or the planned number of students needed to fulfil various social targets (Santiago et alii 2007). It provides stability for the institutions, but does not deal with the differences in the university performances. In *financing by agreements (negotiated funding model)* the institutions are obliged to prepare an annual budget proposal that are submitted to the authorities (e.g. Ministry of Education) who are entitled to allocate resources. It can be effective if the system contains special incentives that are harmonised with the different institutional priorities but in fact the availability of resources often depends on the bargaining power of the

different actors (Padua 2003). In the case of *project financing* universities are preparing and submitting their budgets based on their current and projected needs (Santiago et alii 2007). It is a flexible way of financing but requires special control mechanism and the government must play an active and rational role.

In Hungary the founding of HE institutions is mixture of the normative and negotiated financing models (Polónyi 2004). The state intervention is clearly visible and pervasive in both public and private sector. The logic of the state financial contribution is based on the so-called base-year budget ceiling and this amount of financial resource is distributed by a quota-method. There are three main quotas:

- a) the quota related to the number of the students represents the dominant source of finance.
- b) the quota aimed to maintain the infrastructure (buildings, ICT, library, etc.)
- c) the quota related to the research performance of the university (number and level of degrees owned by the teaching staff, number of PhD students, research performance measured by publications, conference participation, etc.)

The budget of the HE institutions is calculated on a yearly basis and the amount of normative founding is quoted every year according to the actual financial needs of the institutions. As a result the differences in the university performances are not reflected in financing and therefore the system is not able to have any incentive effects on the various actors.

Today every university is interested in having more and more students and being financed on this basis. The financing has never been normative whatever they say. There is a clear basis-principle; the Ministry calculates the founding based on the last year results. I believe the market should decide. The state should finance a certain minimal number of students and the universities should be responsible for the rest of founding. In our case a remarkable part of our income comes from research but we are pressed to spend this money on running expenses. (Vice president of a large Technical University)

In the financing of the Hungarian HE institutions their research performance plays a relatively underestimated role. As we have referred earlier in Hungary both the basic and applied research was delegated to the network of research institutes of the Academy of Sciences, which is independent from universities. In this model the main function of universities is teaching. Partly due to this historical heritage and the presented characteristics of the financing system the teaching activities of the HE institutions are overrepresented compared to their 'research portfolio'. Hungarian universities are incited to focus on transferring existing knowledge instead of creating new one. This is well reflected in their weak position in international competition as it was presented in the first section.

II.2 Structural reforms of the Hungarian HE System

The structural reform of the European higher education often labelled as 'Bologna-process' started in 1998 when the education ministers of France, Germany, Italy and the UK signed the so-called Sorbonne Declaration with the aim of harmonising the European higher education degree systems. In the following year the representatives of 29 European countries joined to the extended version of the document in Bologna. The new document called Bologna Declaration aims 'to create a European space for higher education in order to enhance the employability and mobility of citizens and to increase the international competitiveness of European higher education'¹⁶. The Bologna Declaration defines six specified objectives in order to achieve the declared goals in the restructuring process of the European higher education area:

- (1) the adoption of easily readable and comparable degrees through European Credit Transfer Systems (ECTS) and the implementation of the so-called Diploma Supplement;
- (2) uniform degree structures through the introduction of the so-called two-cycle models where the first cycle is no shorter than 3 years, ends in a practice-oriented, labour market-relevant Bachelor-level degree. The second cycle is the postgraduate level offering Master's and PhD degrees;
- (3) establishment of ECTS-compatible credit system instead of determining the degrees only in years or in semesters;
- (4) increasing mobility of students, teachers, researchers and even the administrative staff;
- (5) European-level cooperation in quality assurance based on comparable methodology and criteria;
- (6) promotion of the European dimension of higher education through closer international cooperation and network creation.

The goals laid down in the Declaration are rather heterogonous. Two of them, 'increasing mobility' and 'promoting the European dimension of the higher education' have a strategic character, while the others are more technical-structural oriented. The document emphasises, although in a very indirect way, the connection between the two types of goals, but on the other hand the way of coordination between them remains open. In other words the Declaration stresses the autonomy of the partner countries in how and when they implement the reforms related to the Bologna process. In addition the Declaration concentrates on the structural dimension of the restructuring and does not deal with the content of changes.

Evaluating the structural reforms of the Bologna process in Hungary, we can state that the Hungarian HE system holds the mixture of various elements of both the centralised and the mechanic educational model. The reform was initiated by the governments but

¹⁶ The Bologna Declaration: an explanation, prepared by Confederation of EU Rectors' Conferences and the Association of European Universities (CRE) p. 4.,

the effective implementation was delegated to the different actors of the HE system without involving other social actors (enterprises, trade unions, etc).

The goals laid down in the Bologna-declaration have taken place in Hungary in a rather contradictory way. The structural reform is considered to be unprepared and unfounded. According to the stakeholders interviewed in the NESOR project this issue is reflected in the phenomenon that the strategic and instrumental goals of the process were weak integrated. The emphasis has been put on the technically feasible elements of the restructuring: introducing the credit system and the two-cycle education model with a relatively little respect to the content of the changes. The creation of the content and structure of the new curricula was delegated to the universities and polytechnics without involving other social actors.

'In the case of the Bologna process, the country would like to adopt something that does not exist in reality. The Bologna process represents only a well-defined set of frameworks that should be filled with national policies. This is the point where the knowledge of decision makers is missing. (...) If we have a look on the governmental side we can see the Hungary must write strategies from time to time and send it to Brussels. These papers are written in a kind of EU-language and are interpretable only at the different levels of the public administration. Even the actors working in various higher educational institutions do not understand and are not capable to implement them.'

(Representative of a nationally important private training company)

The Hungarian HE system is a dual system with practice-oriented polytechnics and theory-centred universities: the two types of institutions were independent from each other and there promoted only narrow possibilities of students' mobility. Central problem is that by the introduction of the two-cycle higher education the decision makers intended to overcome of the rigidity of the dual HE system but the restructuring process was regardless to the institutional traditions. That means that the number and content of the BA programmes were created on the basis of the bargaining and assertive capabilities of the institutions whose interests were rather different.

'The problem is that in the meantime we joined to the Bologna process and it biased the whole system in a radically new direction. The BA level became strongly theory-oriented and we lost the practice-oriented traditions. It is the result of the power of the university lobby. They forced the academic BA in order to keep their position on the market and to avoid of losing students.'

(President of the leading polytechnic in business administration)

The structural reform led to rivalry between the different levels of the HE system (e.g. polytechnics vs. universities). Due to the weakness of the central regulation the result is a very rigid undergraduate system was created with a large number of over-specialised

and academic-oriented programmes that make difficult the students' mobility and, as a non-intended effect, contradict to the original strategic aim of Bologna Declaration.

'A specific feature of the Hungarian system that the heterogeneity of the undergraduate level, which is characteristic in the United States, is completely missing. In Hungary the faculties dominate the system and they are interested to make it rigid and to sustain the status quo.' (Former president of the largest university of technology)

Another stakeholder argued that this is a time-consuming process:

I think that the division of labour between the polytechnics and universities will be evolved in the next 10 years. As a result, it seems that polytechnics will deal with mainly trainings at Bachelor level, while universities will concentrate their efforts on the Master level trainings. (President of a university of economics)

Other stakeholders discussed this view stating that even the training structure did not change significantly. In this context, the main question is how the two levels of the training (i.e. bachelor and master) will evolve, what kind of distribution of work will be shaped between them.

As far as I see, we 'overbooked' the Bachelor level, we try to teach everything at this level and it is not very clear what we will teach at Master level. Each faculty has its own Bachelor training and it is very much cost-demanding. For example, we have maths courses on four faculties in parallel. If we would like to rationalise and make this system cost-effective it would lead to significant lay-offs of the personnel. (President of a university of economics)

It seems that the majority of the educational institutions try to create the new education and training system by keeping as much part of the old organisational structures and hierarchies as possible. The newly implemented bachelor degrees are orientated to the academic skills rather than to the practical knowledge. Dominant opinion among the stakeholders interviewed is that the implementation of the goals of the Bologna Declaration failed and one of the most important social risks of the new system is how the labour market will deal with a mass of fresh graduates having a Bachelor degree without any practice-orientated training.

This results in a growing gap between the demand of the labour market represented by the private and public companies and the supply side of the HE system. It is challenging researches question how these former actors will provide the skills that are necessary for their everyday operation at the level of the labour process. Some stakeholders argued that the Hungarian companies significantly differ from each other in their knowledge demand as well as in the ways they satisfy this demand:

"The labour market is rather segmented. There are multinational companies (MNCs), they have their own internal training system. They are always complaining but in fact they are more than satisfied. An increasing number of MNCs delocalise their R&D activities to Hungary. The other big part of the labour market is represented by the public institutions. Here, we have huge problems because the state does not define standards or other elements of an evaluation system. The knowledge demands of this sector are not very much visible. The third bigger group of the labour market is represented by the SMEs which employs 80% of the labour force. They do not know what do they need and they have no voice, i.e. any form of interest representation."
Representative of a nationally important private training company

II.3 Corporate governance

One of the most problematic dimensions of university governance in Hungary is the lack of real owners. The highest decision making body of the universities is the Senate. Its members are the president, around 50% of the members are recruited from the teaching staff of the different faculties, one third of them are elected by the students, 10% of the members are representatives of the non-teaching staff and other 10% is represented by the trade unions. The Senate with these structural characteristics has the decision making authority in each field of the university. The real power is in the hand of the faculties and in the hand of students. In other words, this means that university presidents in the Hungarian higher education system are the prisoners of the faculties and the self-governance body.

'The university president elections will be soon. In this situation I adapt to a wait and see behaviour. During the last 6 months before the election I am organising various official sessions related to the routine activities of the university. In these meetings I try to send only positive messages and wish to avoid any conflict situation. (...) Student representatives have extremely strong voice. In the Senate meetings, they decide to resolve those disputed issues in which there is no consent among faculty representatives. In most of the cases they are also the president makers. During the last years the votes of the student representatives undermined two important university mergers.'
(President of a large university of economics)

The Senate governs the universities without exercising the ownership rights. It leads to two contradictory tendencies. One on hand it restricts the autonomy of the university management, while on the other it weakens the management's responsibility, since the decisions are taken by those who do not have to take the consequences. Due to the weak power of the university top management it is extremely difficult to integrate the particular interests, which encourages the actors to maintain the 'status quo'.

II.4 Autonomy in finances and HR management

In relation to the economic, financial and HRM autonomy it is worth noting that universities have no autonomy in their asset management and they have no significant freedom in the field of HRM practices. The overwhelming majority of the higher education institutions in Hungary are public, while private universities (e.g. Central European University) represent a minority. As a consequence, the majority of the teaching staff have a status of public servant. This means that they have a state-regulated working conditions, promotion and wage classification system. The university management has rather limited power to influence these characteristics of employment. Within these circumstances it is almost impossible to introduce performance assessment and performance related wage-setting and career planning system. Universities are able to control the performance and quality of their human resources only to a small extent. The lack of effective incentives strongly influences not just the individual performances but the performance of the system as a whole.

III. Some concluding remarks

In analysing the performance of the European higher education visible varieties were identified in the practice of the Higher Education (HE) Systems in the countries participating in this project. We may say that the research performance of the Dutch and Austrian HE (belonging into the "Nordic" and the "Continental" models of the market economies) are better suited in the transformation process in comparison with both Italy and Spain (belonging to the "Mediterranean" country cluster) and with Hungary and Poland, belonging into the category of the New Member States (NMS).

In comparison of the research performances of the European Universities with the US universities, it is obvious that the EU has a much weaker position. Among the several factors explaining these differences the following contradiction has to be stressed as responsible for the performance gap. The autonomy of the European universities is not accompanied with the vigorous performance assessment system and with the "real ownership". The latter shortcomings are especially true for the Hungarian, Polish and the Italian universities.

The massification of the HE system was carried out at the expense of the quality and these patterns of changes are especially true in Hungary, Poland and Italy. The fast growth in the size of the student population was not accompanied by the necessary growth in human, financial and infrastructural resources. Teaching technology and contents (curricula) were not consistent with the requirements of the mass education. The HE system remained both underfinanced (especially by public funds) and the available resources were allocated in an inefficiently (i.e. lacking the rigorous performance assessment). In addition, the research portfolio of the universities investigated eroded, which had an obvious negative impacts on the quality of the teaching even in short or medium term perspective.

Focusing on the Hungarian experiences, the guiding principles of the Bologna Declaration in this country have been introduced in a rather contradictory way. The

implementation process can be characterised by the shortage of coherent strategies and by the dominance of the operational and technical elements of the institutional transformation. And the lack of involvement of the stakeholders (i.e. actors representing the demand side of the knowledge) in this process further undermined the original aim of the Bologna Process. Therefore the new HE system is still supply-driven, e.g. the number and content of the programmes does not fit to the real labour market demands. As non-intended outcome of these changes, a rigid undergraduate system was created with a large number of over-specialised programmes, which may constrain the students' mobility, etc.

One of the weakest points of the Hungarian higher education system is the university governance and management. The most neglected characteristic of the university governance in Hungary is the lack of real ownership. In this context, universities are unable to assess and evaluate their teaching and research performances and to develop autonomous governance system necessary to cope with challenges of the increased global competition.